

Amendments to the Specification:

Please replace on page 1 the first paragraph under the heading "1. Field of the Invention" as follows:

The present invention relates to electrical energy storage systems and in particular to battery packs composed of multiple battery modules with adjustable configurations. The reconfigurable electrical energy storage system is especially useful in hybrid electric vehicles, ships, or boats (i.e., vehicles, ships, or boats powered by both a prime mover and an electrical energy power source) used in military operations and in other fixed or moving platforms where it is desirable to be able to redirect and level shift the stored energy in the reconfigurable electrical energy storage system. Examples of such reconfigurations include a shift from a low voltage parallel configuration to high voltage series/ parallel configurations for optimizing impedance match, minimizing or eliminating the need for an associated power converter for pulsed power applications, powering other subsystems or matching variable DC link main systems as envisioned in the original CHPS (combat hybrid power systems – a Defense Advanced Research Project Agency (DARPA) initiative) combat hybrid vehicle. That envisioned system shifted from a 300-400V low voltage parade voltage to a higher 900-1200V Combat status bus voltage.

Please replace on page 2 the first paragraph under the heading "2. Description of the Related Art" as follows:

Hybrid electric vehicles (HEVs), hybrid electric ships and boats (such as the ~~QE2~~ Queen Elizabeth II) afford greater fuel efficiency than vehicles or vessels having only a prime mover (e.g., diesel or gasoline engine, gas turbine and fuel cell). This greater efficiency is obtained by using an energy store to level the load on the prime mover - providing peaking power to an electric motor, or storing energy during low power prime mover operation or during regenerative braking.

Please replace the paragraph bridging pages 2 and 3 with the following:

Such a peak power capability could enhance both offensive and defensive capabilities if it were easily convertible to voltages commensurate with a range of potential short-term and pulsed loads. For example, Electromagnetic Armor (EMA) provides lightweight protection to combat vehicles against rocket-propelled grenade attacks. The energy required for the EMA to function is stored in a fast discharge capacitor bank, which is recharged either from a generator operated by the prime mover of the vehicle, or from an intermediate energy storage system. In a hybrid elastic vehicle (HEV), the electric energy battery pack also could function as such an intermediate energy storage system. However, in order to provide the approximately

10 kV needed as the input voltage to the capacitor bank, a DC-DC power converter is needed between the intermediate energy storage system and the capacitor bank.

Please replace the paragraph bridging pages 6 and 7 with the following:

Figure 4 is a schematic diagram of an electronically reconfigurable battery including a current limiting section according to second preferred embodiment of the present invention, for use with an electromagnetic armor (EMA) system for a combat hybrid electric vehicle (HEV) and other platforms;

Please replace the first and second full paragraphs on page 7 with the following:

Figure 5 is a schematic diagram of an electronically reconfigurable battery including a single stage converter (SSC) according to a third preferred embodiment of the present invention, for use with an electromagnetic armor (EMA), ETC (Electric-Thermal Cannon) Gun, pulsed laser, pulsed beam, energy or particle source systems for a combat hybrid electric vehicle and other platforms; and

Figure 6 is a schematic diagram of an electronically reconfigurable battery including a single stage buck/boost converter section (SSC) according to an alternate configuration of the third preferred embodiment of the present invention, for use with an electromagnetic armor (EMA), ETC (Electric-Thermal Cannon) Gun, pulsed laser,

pulsed beam, energy or particle source systems for a combat hybrid electric vehicle and other platforms.

Please replace the last paragraph on page 7 with the following:

As shown in Fig. 1, a hybrid vehicle platform power distribution system includes a prime mover (e.g., diesel engine, gas turbine, fuel cell, etc.) coupled to the vehicle transmission (gears), and an n-phase electric motor coupled directly to the drive wheels of the vehicle. The gears also are coupled to a generator for recharging the electrical energy storage (ERB (electronically reconfigurable battery) energy store), for example, during regenerative vehicle braking and during low power prime mover operation. The ERB energy store functions to power the n-phase motor for vehicle load leveling and/or silent mobility operation, and also is used to provide power to various short-term and pulsed load devices. Power electronic circuitry controls the reconfiguration of the ERB, the interfacing between the generator, motor, ERB store, and short-term and pulsed loads, as well as providing appropriate bus voltage to a voltage bus (hotel bus).